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The impact of academic procrastination behaviors of the students in the certificate program in English language teaching on their learning modalities and academic achievements

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Abstract

Learning style is personal characteristics of students which determine their preferences in perceiving the environment, processing information and communicating to their environment and reacting to it. Procrastination is defined as unnecessarily deferment of an action that should be done or have priority or leaving it to the last minute. This study analyzes the interaction among learning modalities, academic procrastination behaviors and academic achievements of the students participating in the Certificate Program in English Language Teaching delivered in the Faculty of Educational Science, Ankara University during the academic year 2008/09. It is found that there is no significant correlation between the academic achievement and academic procrastination, and learning modalities and academic achievement of the students. It is also seen that there is a significant positive correlation of .05 between learning modalities and academic procrastination behaviors of the students. This means that a course design based on the learning modalities of the students may result in a decrease in academic procrastination behaviors of the students and thereby an increase in the academic achievement.

Keywords: Academic procrastination; learning modalities; learning styles; academic achievement.

1. Introduction

Learning-teaching process is one of the most difficult areas to examine in a curriculum. Particularly a clear analysis of in-class interactions will provide a solution for many unsolved problems within the learning-teaching process. Teacher and students are the fundamental elements of the learning-teaching process. In fact, the whole process is built on transferring or sharing certain content in line with the predetermined objectives. And when an outcome is attained at the desired level in the end, it can be said that the learning-teaching process is effective. Maybe the most critical element within this process is the process itself. Strategies and tactics provide a larger room for the teacher as compared to the methods and techniques. Style is seen as a set of personal characteristics leading these two conceptual structures. Modality concept, on the other hand, includes perceptual preferences of the individuals developed on the basis of their styles.

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The recent researches in the field clearly set forth the fact that the human brain is specialized and unique as well as exhibits situational characteristics and within this framework learning should also be considered as a mental activity.

If the styles of individuals are identified, then it can be envisaged more easily how they can learn and what kind of a teaching design may be implemented. Therefore teacher can create suitable environments both for himself or herself and also for students. As teaching activity is both a science and an art at the same time, teacher should try to make this process valuable to experience for the learners.

Researches indicate that learning process is realized more easily, effectively and permanently in the environments designed by taking into account the personal characteristics of learners. In ensuring harmonization between learner characteristics and method, environment and materials, the most important precondition is identification of the characteristics of learner group. Actually, it is impossible to indentify all characteristics of the learners. Characteristic elements generally regarded as effective in the learning process are those reflecting their identity and cultural features, prerequisite competencies learners have and learning styles and preferences of the learners.

2. Theoretical Framework

2.1. Learning style

Learning style is personal characteristics of students which determine their preferences in perceiving the environment, processing information and communicating to their environment and reacting to it. To this end, researches on the correlation between academic achievement levels and learning styles of the students can produce beneficial information for the relevant student group and teachers. Different models and scales are used in identification of the learning styles. They include various approaches which are used very commonly. This study is mainly based on a point of view including the diagnostic approach which is mainly adopted by Dunn and Dunn. In the literature, Dunn (1993a) defines the concept of learning style as "a path which varies for each individual, starts with concentration of the individual on new and challenging information and continues with absorbing and retaining the information". When the definitions for the learning styles are examined, it is seen that biological predications are very intensive. Given the uniqueness of each human being, although styles of individuals do not change, learning styles can change over time and according to the conditions (Thies, 1979). In the models of learning styles, each theorist attaches different levels of importance to the dimensions of the learning styles which are grouped in terms of cognitive, affective and physiological perspectives. Some of the learning style models developed by the theorists are touched upon in the following parts of the study.

Learning Style Model developed by Dunn and Dunn is based on the idea that individuals have a unique set of biological and development characteristics. These exclusive characteristics of the individual are the main indicator for how s/he will learn new information and skills. If the learning environments are arranged in accordance with learning difficulties of students, then quantity and quality of the learning will enhance. Learning Style Inventory defines 5 fundamental features of the stimulant resources and describes 21 learning styles (Dunn-Dunn and Price 1985). Curry supports the validity and reliability of the learning styles inventory, whereas he suggests that some components of the learning styles are in compliance with global/analytical, hemispheric and reflective instructional preference structure (Curry, 1990).

Dunn and Dunn Learning Style Model, which is one of the most commonly used learning style models, was developed by Rita and Kenneth Dunn for students with academic deficiency. The basic principle of the Dunn and Dunn Learning Style Model is that "Every student learns in different ways". Dunn and Dunn Learning Style Model is based on the following assumptions (Dunn and Dunn, 1993b):

- *It is possible to determine personal preferences of students for the learning environments.*
- *It is possible to arrange the learning environment in order to use different forms of teaching and to meet the preferences of students. And this develops learning capability of the student.*

Although the Dunn and Dunn Learning Style Model was first developed to be used in the primary schools, nowadays it is used at each level of education. In implementation of the model, teachers, educational administrators and staff should pay attention to the following issues:

- *Most of the individuals can learn.*
- *Learning environments, resources and approaches respond to various learning style strengths.*

- *Everybody has learning strengths, but different people have very different learning strengths.*
- *There are some individual learning techniques and their outcomes can be measured reliably.*
- *If suitable environments, resources and approaches are ensured, students may attain statistically high achievement levels in academic tests and attitude tests.*
- *Many teachers can learn using learning styles as the cornerstone of their own teaching.*
- *Most students can learn with their own learning styles when they concentrate on new or difficult academic materials.*

When the researches explaining the correlation between the academic achievement and personal learning style are examined, it is seen that students learn different from each other, student performance in different subjects is related to how students learn in fact; and when student are taught with these approaches and with the resources supplementing their learning styles, their academic achievement increase significantly (Price, 2001:9).

Fundamental assumptions of the learning style are so simple. According to the learning style assumption, all children can learn but they cannot learn in the same way. Different children can learn best with different ways of learning and there is not a single teaching approach suitable for all children. Learning should be designed and implemented by taking into account different learning styles. Most of the educators agree on the fact that students learn in different ways (Dunn and Dunn 2002:11).

2.2. Academic Procrastination

Procrastination behavior is very common and a serious problem in the era we live in. However it seen that researchers cannot reach a consensus on the definition of this phenomenon of procrastination (Ferrari, Johnson and McCown, 1995).

In general, various procrastination types are defined in the relevant literature. These are academic procrastination including leaving the academic duties to the last minute like preparation for exams and doing homework (Slomon and Rothblum, 1984; Milgram, Mey-Tal and Levinson, 1998); life routine procrastination which manifests itself as having difficulty in planning routine tasks of daily living and in doing these tasks in time (Lay, 1986); decisional procrastination which emerges as procrastination in decision-making in case of conflict situations and various options (Ferrari and Dovidio, 2000); and compulsive procrastination which appears as deferring both the tasks to be done and also the decisions to be taken (Ferrari, 1991). In another classification, procrastination is grouped into two basic structures. First one of them is procrastination as personality traits, which is mainly based on procrastination in decision-making and life routine of daily living; second type is conditional procrastination including also the academic procrastination.

Beswick, Rothblum and Mann (1988) examined the correlation between academic achievements and academic procrastination behaviors of students. In this study, academic achievement is evaluated in terms of draft term papers prepared by students for psychology subject, their grades for these papers and their exam scores for the same subject. According to the research results, it is seen that there is a significant negative correlation (-.26) between grades of the students for their term paper drafts and the academic procrastination behaviors; a significant negative correlation (-.21) between their grades for the term paper and the academic procrastination behaviors and again a significant negative correlation (-.30) between their scores in the final examination of the psychology and the academic procrastination behaviors. As a consequence, it can be said that there is a negative correlation between procrastination behaviors and academic achievements of the students.

In their study, Rothblum, Solomon and Mukarami (1986) examined the cognitive, behavioral and affective differences between the academic procrastinator and non-procrastinator students, and they also look at the correlation between academic procrastination and grade point average at the end of the term. They found a significant negative correlation (-.22) between academic procrastination and grade point average. It was indicated that grade point average of procrastinator students are lower than non-procrastinator students. Çakıcı (2003) also found a negative correlation between academic procrastination behavior and academic achievement.

Studies on whether academic procrastination and general procrastination behaviors vary by gender put forth different results. Kachgal, Hansen and Nutter (2001) carried out a study on 68 female and 73 male students and found that academic procrastination behavior does not show a significant difference by gender. In another study, Milgram and Marshevsky (1995) investigated variables in academic procrastination on 115 male and 85 female students in Israel and found that males are much more procrastinator than the females.

3. Method

The purpose of this study is to analyze the interaction among learning modalities, academic procrastination behaviors and academic achievements of the students participating in the Certificate Program in English Language Teaching in the Faculty of Educational Sciences at Ankara University in the academic year 2008/09. Within this framework, the following questions are aimed to be answered:

What is the level of interaction among

- general learning modalities and academic achievements
- academic procrastination behaviors and learning modalities
- academic procrastination behaviors and academic achievements

of the students participating in the Certificate Program in English Language Teaching?

The research model of this study is the singular and relational descriptive model which aims at defining the presence and/or degree of covariance among two or more variables. The subjects of the study are 77 students attending the Department of English Language and Literature and participating in the Certificate Program in English Language Teaching in the Faculty of Education Sciences at Ankara University in the academic year 2008/09. In order to identify learning modalities of the students, a measurement tool of 80 items under 5 main and 19 sub variables was developed by Çelik and Babadoğan (2004) with an effort to adapt Dunn's learning style inventory to the Turkish culture, and in order to identify academic procrastination behaviors, the measurement tool developed by Çakıcı (2003) was used. The answers of the students were collected through an optical form and the data obtained after the evaluation of these answers were analyzed by SPSS 13.0 program.

4. Discussion and Conclusion

A big majority of the subjects that participated in the research were female students. Table 1 shows the relevant details.

Table 1. Distribution of subjects by gender

Gender	**No**	***Percent***
Female	68	*88.31*
Male	9	*11.69*
TOTAL	**77**	***100.00***

When the data collection tool entirely consisting of one-way positive items was analyzed on item basis, over half of the subjects (*57.23 %*) said that they agree with the expressions related to the modalities. Table 2 shows the relevant details.

Table 2. Agreement of subjects to the expressions on learning modalities

Learning Modalities	**)uestions**	***Percent***
I absolutely disagree	553	*8.98*
I disagree	1200	*19.48*
I am not certain	882	*14.32*
I agree	1952	*31.69*
I absolutely agree	1573	*25.54*
TOTAL	**6,160**	***100.00***

When the learning modalities (preferences) of subjects are considered in terms of main and sub variables, it is seen that the environmental modalities have the highest average (*x: 3.35*) while the psychological modalities have the lowest average (*x: 2.89*). As for the sub variables, emotional guidance has the highest average (*x: 4.34*) while use of global/analytical process under the psychological main variable has the lowest average (*x: 2.66*).

When physical sub variables are analyzed, it can be said that students prefer plenty of bright light. Students agree with the items on the elements of temperature, environment and sound. Students generally say that they prefer to study in warm environments. It is seen that students prefer to study in clean and tidy environment with a high level of agreement. In terms of sound element, on the other hand, it is understood that students prefer to study in quiet environments. The global/analytical element under the psychological main variable relates to whether students learn better or gradual description by handling only one aspect during processing. Students with global learning preferences are interested in meanings and consequences as a whole. However, students that prefer analytical

learning are interested in one detail at one time within a meaningful sequence. Students' uncertainty about a study of which limits are determined may be interpreted that students partially expect guidance by teachers when it is evaluated with the relevant items of the tables above. However, when the fact that the students disagree that they learn one thing at one time is evaluated together with the relevant items, there emerges an inconsistency. Sociological preferences relate to the social environment in which students want to learn. It is seen that CPELT students generally prefer to study alone. This finding is in consistency with the finding that students prefer to study in quiet environments. The adult element refers to receiving guidance from or being in interaction with an adult. While students are uncertain about learning by listening to lessons from an adult, they say that they want to make themselves and their parents happy by getting high scores as it is seen in the tables above. Physiological characteristics relate to such characteristics as students' selection of sense organs and timeframe and whether they need to eat something or move while learning. Students generally need to move during learning. They say that sitting at the desk for a long time and not participating in the process actively impede their learning.

Table 3. Averages of the subjects' learning modalit es

Main/Sub Variables	Average
Physical	**3.35**
Sound	3.95
Temperature	3.52
Light	3.25
Environment	3.90
Emotional	**3.09**
Motivation	3.93
Decisiveness	2.78
Responsibility	3.15
Guidance	4.34
Physiological	**2.98**
Visual	3.95
Audio	3.23
Tactile	3.15
Eating and drinking	2.94
Time	3.27
Mobility	3.41
Psychological	**2.89**
Global/analytical	2.66
Brain hemispheres	4.11
Way of thinking	3.08
Sociological	**2.99**
Individual-friend	3.11
Adult	3.89

When the agreement of students to the expressions related to academic procrastination is examined, it is seen in the Table 4 that agreement of students concentrates on the expressions of barely, sometimes and usually (*70.06 percent*) in a balanced way.

Table 4. Agreement of subjects to the expressions on academic procrastination

Academic procrastination	Item	*Percent*
Never	221	*15.11*
Barely	336	*22.97*
Sometimes	343	*23.44*
Usually	346	*23.65*
Always	217	*14.83*
TOTAL	**1,463**	***100.00***

When averages of students' agreement to the expressions related to academic procrastination are considered, the highest average is seen in timely submission of assignments and projects. However, it can be said that procrastination is more common in less interesting topics. Students show uncertainty particularly in preparation for examinations. When it is evaluated together with the expression that students do not prepare for classes, the main

reasons for procrastination can be seen. It can be concluded that characteristics and preferences of students are ignored since a style-based course design is not adopted.

Table 5. Averages of the subjects in terms of expressions related to academic procrastination

Academic Procrastination Behaviors	Value	Comment
I submit my assignments/projects in time	4.25	Always
I have time to review subjects before examinations	3.57	Always
I generally complete my assignments/projects just before the deadline	3.53	Always
I leave boring subjects to the last minute	3.49	Always
I frequently take break during studying to do something, to talk to somebody, to drink tea or coffee, etc.	3.45	Always
I am a student who leaves to study to the last minute but who says next time s/he is going to start to study in tim	3.40	Sometimes
I study a subject from every aspect before an examination	3.38	Sometimes
Whenever I start to study I remember some other things that I should do	3.09	Sometimes
I deal with some other things with no priority as the date of examination is approaching even if I am informed ir ıdvance.	3.08	Sometimes
I leave studying for examinations to the last day without any sound reason even if they are important	3.04	Sometimes
I stop studying early to do more enjoyable things	3.00	Sometimes
I leave studying for even important subjects to the last day	2.90	Sometimes
If I prepare a study program, I stick to it	2.70	Sometimes
I fail some subjects because I leave studying to the last day	2.70	Sometimes
I leave my assignments/projects to the last day without any sound reasons	2.82	Sometimes
I read the texts assigned for any subject before I go to the class	2.49	Sometimes
I study regularly	2.56	Barely
I prepare for the subjects before I go to the class	1.94	Barely
I cannot complete my assignments/projects in time	1.66	Never

When the interaction among academic procrastination, academic achievement and learning preferences of the students participating in the research is questioned, the current situation becomes clearer. No significant correlation could be found between academic achievement and academic procrastination *(r_{sp}:-0.09/ sd_{sp}: 0.49)*. This result which is negative but insignificant is not in line with the research results pointing to a negative significant correlation. This is also the case for the correlation between learning modalities and academic achievements of the students *(r_{ms}: 0.10/ sd_{ms}: 0.47)*. However, there is a positive significant correlation of .05 between learning modalities and academic procrastination of the students *(r_{mp}: 0.35/sd_{mp}: 0.35)*. This means that a course design based on learning modalities of the students can decrease academic procrastination and accordingly increase academic achievement.

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